IN THE CLAIMS:

Please cancel Claims 1-9 and add new claims 10-22, as follows:

AMENDMENTS TO THE CLAIMS:

1-9 (canceled)

10. (new) A refrigeration device, comprising:

a thermally insulating housing;

said thermally insulating housing enclosing an inner chamber and an evaporator arranged in said housing separated from said inner chamber;

said evaporator including a surface where an ice layer forms during operation;

a pair of temperature sensors placed in the vicinity of said evaporator such that for a given thickness of said ice layer only one of said temperature sensors is embedded in said ice layer;

a heating device for heating said evaporator;

a monitoring circuit connected to said pair of temperature sensors; and

said monitoring circuit determines the difference (ΔT) between the temperature values detected by said pair of temperature sensors and activates said heating device when said temperature difference exceeds a predetermined value (ΔT_{max}).

11. (new) The refrigeration device according to claim 10, including a first one of said temperature sensors is arranged directly on said surface of said evaporator and said second one of said temperature sensors is arranged at a distance from said surface.

12. (new) The refrigeration device according to claim 11, including a channel communicating with said inner chamber

and said evaporator arranged in said channel communicating with said inner chamber.

13. (new) The refrigeration device according to claim 12, including said second one of said temperature sensors arranged on an output of said channel terminating in said inner chamber.

14. (new) The refrigeration device according to claim 11, including said evaporator arranged in said housing separated from said inner chamber by an insulating partition having at least one channel communicating with said inner chamber through said partition and said evaporator communicating with said inner chamber through said channel.

15. (new) The refrigeration device according to claim 14, including said second one of said temperature sensors arranged on an output of said channel terminating in said inner chamber.

16. (new) The refrigeration device according to claim 10, including a carrier attached to said evaporator surface and a first one of said temperature sensors is arranged directly on said carrier adjacent said surface of said evaporator and said second one of said temperature sensors is arranged on said carrier at a distance from said first one of said temperature sensors and said surface.

17. (new) An operating method for a refrigeration device, including a thermally insulating housing;

said thermally insulating housing enclosing an inner chamber and an evaporator arranged in said housing separated from said inner chamber;

said evaporator including a surface where an ice layer forms during operation;

a pair of temperature sensors placed in the vicinity of said evaporator such that for a given thickness of said ice layer only one of said temperature sensors is embedded in said ice layer;

a heating device for heating said evaporator;

a monitoring circuit connected to said pair of temperature sensors;

said monitoring circuit determining the difference (ΔT) between the temperature values detected by said pair of temperature sensors;

the method including the steps of:

a) detecting a difference (ΔT) between temperature values detected by said pair of temperature sensors; and

b) deciding that a defrosting procedure is necessary, if the difference (ΔT) exceeds a limit value (ΔT_{max}).

18. (new) The method according to claim 17, including said steps a) and b) are in each case performed after a preset delay after said evaporator is started up.

19. (new) The method according to claim 18, including said steps a) and b) are performed if the change in speed of temperature on at least one of both sensors has fallen below a predetermined limit value.

20. (new) The method according to claim 17, including said evaporator is heated when it has been decided that a defrosting procedure is necessary.

21. (new) The method according to claim 17, including said monitoring circuit detecting said temperature difference and deciding that said defrosting procedure is necessary.

22. (new) The method according to claim 21, including said monitoring circuit activates said heating device when said temperature difference exceeds a predetermined value (ΔT_{max}).